Amendments to the Claims:

The listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (currently amended) An electronic device circuit comprising:

a bus interface for communications with a host;

an interface unit electrically coupled to the bus interface for, in a startup procedure, ~~downloading~~ receiving operational firmware from the host and receiving initialization data required for initializing the electronic device from the host;

a control circuit electrically coupled to the interface unit for transferring the ~~downloaded~~ received operational firmware to a volatile memory; and

a microprocessor electrically coupled to the control circuit for executing the ~~downloaded~~ received operational firmware while stored in the volatile memory;

wherein the microprocessor controls the normal operations of the electronic device circuit according to the ~~downloaded~~ received operational firmware, and the initialization data contains instructions required to initialize the components of the electronic device circuit before the microprocessor is able to execute the operational firmware.

2. (previously presented) The electronic device circuit of claim 1 wherein the bus interface conforms to USB, IDE, SATA, SAS, or SCSI interface standards.

3. (previously presented) The electronic device circuit of claim 1 wherein the interface unit is a macro.

4. (previously presented) The electronic device circuit of claim 3 wherein the macro comprises handshaking, data reception, and writing received data into the memory functions.

5-6. (cancelled)

7. (previously presented) The electronic device circuit of claim 1 wherein the host is a computer system.

8. (currently amended) The electronic device circuit of claim 1 wherein the microprocessor executes the ~~downloaded~~ received operational firmware without accessing a non-volatile memory.

9. (previously presented) The electronic device circuit of claim 1 wherein the normal operations of the electronic device circuit at least include reading data from an optical disc.

10. (currently amended) The electronic device circuit of claim 1 wherein the volatile memory comprises the ~~downloaded~~ received operational firmware being executed by the microprocessor to control normal operations of the electronic device circuit.

11. (currently amended) An electronic device comprising a download mode wherein, in a startup procedure, operational firmware is ~~downloaded~~ received from an external host and stored into a volatile memory of the electronic device and initialization data required for initializing the electronic device is received from the external host, followed by a normal mode wherein a microprocessor of the electronic device executes the operational firmware stored in the volatile memory to control normal operations of the electronic device, wherein the initialization data contains instructions required to initialize the components of the electronic device before the microprocessor is able to execute the operational firmware.

12. (previously presented) The electronic device of claim 11 wherein the normal operations of the electronic device at least include reading data from an optical disc, processing the data, and transferring the processed data to the host.

13. (cancelled)

14. (currently amended) The electronic device of claim 11 wherein the operational firmware is ~~downloaded~~ received over a bus interface conforming to USB, IDE, SATA, SAS, or SCSI interface standards.

15. (previously presented) The electronic device of claim 11 wherein the host is a computer system.

16. (currently amended) A method of operating an electronic device, the electronic device comprising a control circuit connected to a microprocessor, a volatile memory, and a bus interface connected to a host, the method comprising:

~~downloading~~ receiving operational firmware from the host;

receiving initialization data required for initializing the electronic device from the host when the electronic device in a startup procedure, wherein the initialization data contains instructions required to initialize the components of the electronic device before the microprocessor is able to execute the operational firmware;

writing the operational firmware into the volatile memory; and

the microprocessor executing the operational firmware in the volatile memory to control normal operations of the electronic device.

17. (cancelled)

18. (currently amended) The method of claim 16 wherein the operational firmware is ~~downloaded~~ received over a bus interface conforming to USB, IDE, SATA, SAS,

or SCSI interface standards.

19. (currently amended) The method of claim 16 further comprising the electronic device transmitting an electrical signal to an application program in the host to begin ~~downloading~~ receiving the operational firmware.

20. (original) The method of claim 16 wherein the host is a computer system.

21. (currently amended) A computer system comprising:

a host computer comprising operational firmware for controlling operations of an electronic device and initialization data ~~required~~ for initializing the electronic device; and

the electronic device comprising:

a volatile memory comprising the operational firmware ~~downloaded~~ received from the host computer ~~over~~ through a connecting bus interface; and

a microprocessor executing the operational firmware in the volatile memory for controlling normal operations of the electronic device;

wherein the electronic device further receives the initialization data from the host computer when the electronic device is in a startup procedure, ~~and~~ the initialization data contains instructions required to initialize the components of the electronic device before the microprocessor is able to execute the operational firmware.

22. (previously presented) The computer system of claim 21 wherein the normal operations of the electronic device at least include controlling the rotational speed of an optical disc in the electronic device and reading data from the optical disc.

23. (original) The computer system of claim 21 wherein the bus interface conforms to

USB, IDE, SATA, SAS, or SCSI interface standards.

24. (cancelled)

25. (currently amended) An electronic device controller comprising:

a bus interface for communications with a host;

a volatile memory for storing operational firmware ~~downloaded~~ received from the host;

a microprocessor for controlling normal operations of the electronic device by executing the operational firmware stored in the volatile memory;

an RF circuit; and

a control circuit connected to the bus interface, the volatile memory, the microprocessor, and the RF circuit;

wherein initialization data required for initializing the electronic device is received from the host in a startup procedure, ~~and~~ the initialization data contains instructions required to initialize the components of the electronic device before the microprocessor is able to execute the operational firmware.

26. (currently amended) The electronic device controller of claim 25 wherein the volatile memory comprises the ~~downloaded~~ received operational firmware being executed by the microprocessor to control normal operations of the electronic device.

27. (currently amended) An electronic device circuit used in a host system, wherein the electronic device circuit has operational firmware ~~downloaded~~ transferred from the host system to a volatile memory through a bus interface ~~every time~~ after the host being powered on, the electronic device circuit comprising:

a microprocessor for executing the ~~downloaded~~ received operational firmware while stored in the volatile memory;

wherein the microprocessor controls the normal operations of the electronic

device according to the ~~downloaded~~ received operational firmware, and initialization data required for initializing the electronic device circuit is received from the host system in a startup procedure, ~~and~~ the initialization data contains instructions required to initialize the components of the electronic device circuit before the microprocessor is able to execute the operational firmware.

28. (previously presented) The electronic device circuit of claim 27 wherein the bus interface conforms to USB, IDE, SATA, SAS, or SCSI interface standards.

29. (cancelled)

30. (previously presented) The electronic device circuit of claim 27 wherein the host system is a computer system.

31. (currently amended) The electronic device circuit of claim 27 wherein the microprocessor executes the ~~downloaded~~ received operational firmware without accessing a non-volatile memory.

32. (previously presented) The electronic device circuit of claim 27 wherein the host system comprises the volatile memory.

33. (previously presented) The electronic device circuit of claim 27 wherein the host system comprises a host controller accessing the volatile memory that is shared by the host system and the microprocessor during the normal operation.

34. (previously presented) The electronic device circuit of claim 27 wherein the volatile memory is accessed only by the electronic device circuit on the normal operation.

35. (previously presented) The electronic device circuit of claim 27 wherein the electronic device circuit comprises the volatile memory.

36-37. (cancelled)